



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D5557-1

Job Sheet 196068



Part No: D5557-1

Job Qty: 4 pcs

D5557-1  
21  
9-88

Part Name: Cutter Blade



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/5/19

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 7/10/19

Description:

Type: Stock

Note: TBD Dwg D5557 Rev.A7 IPP Rev.A New issue 18/01/29 JFS Verified by:DD

Ship Via:

## Bill of Materials

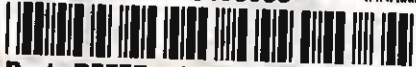
## Job Routing

| Op No | Operation   | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier | Sign-off      |
|-------|-------------|-------|------------|----------|-----------|---------|---------------------|---------------|
|       |             |       |            |          | Setup Hrs | Run Hrs |                     |               |
| 110   | HAAS 4 Axis | 4 pcs | 7/10/19    |          | 1.00      | 2.00    | HAAS - 1            | mmml 14/06/20 |
|       |             |       |            |          |           |         | HAAS - 2            |               |
|       |             |       |            |          |           |         | HAAS - 3            |               |
|       |             |       |            |          |           |         | HAAS - 4            |               |
| 120   | QC 2        | 4 pcs | 7/10/19    |          | 0.00      | 0.00    | QC 2 - 1            | mmml 19/06/20 |
|       |             |       |            |          |           |         | QC 2 - 12           |               |
|       |             |       |            |          |           |         | QC 2 - 14           |               |
|       |             |       |            |          |           |         | QC 2 - 17           |               |
|       |             |       |            |          |           |         | QC 2 - 19           |               |
|       |             |       |            |          |           |         | QC 2 - 2            |               |
|       |             |       |            |          |           |         | QC 2 - 20           |               |
|       |             |       |            |          |           |         | QC 2 - 22           |               |
|       |             |       |            |          |           |         | QC 2 - 23           |               |
|       |             |       |            |          |           |         | QC 2 - 25           |               |
|       |             |       |            |          |           |         | QC 2 - 32           |               |
|       |             |       |            |          |           |         | QC 2 - 33           |               |
|       |             |       |            |          |           |         | QC 2 - 35           |               |
|       |             |       |            |          |           |         | QC 2 - 39           |               |
|       |             |       |            |          |           |         | QC 2 - 4            |               |
|       |             |       |            |          |           |         | QC 2 - 40           |               |
|       |             |       |            |          |           |         | QC 2 - 44           |               |
|       |             |       |            |          |           |         | QC 2 - 45           |               |
|       |             |       |            |          |           |         | QC 2 - 48           |               |
|       |             |       |            |          |           |         | QC 2 - 49           |               |
|       |             |       |            |          |           |         | QC 2 - 50           |               |
|       |             |       |            |          |           |         | QC 2 - 51           |               |
|       |             |       |            |          |           |         | QC 2 - 52           |               |
|       |             |       |            |          |           |         | QC 2 - 57           |               |
|       |             |       |            |          |           |         | QC 2 - 62           |               |
|       |             |       |            |          |           |         | QC 2 - 63           |               |
|       |             |       |            |          |           |         | QC 2 - 8            |               |



Dart Aerospace Ltd.  
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CANADA  
TEL: 1 613 632-5200  
Email: sales@dartaero.com  
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Container No: S193953



Part: D5557-1

Job No: 196068

Serial No/Batch: S193953

Revision: PA7

Inspector:

Exp Date:

Instructions: Various STC's

Date: 06/28/19

6/5/2019

## [Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

|                                   |       |         |           |                        |             |
|-----------------------------------|-------|---------|-----------|------------------------|-------------|
| 130 QC 8                          | 4 pcs | 7/10/19 | 0.00 0.00 | QC 2 - 66              |             |
|                                   |       |         |           | QC 2 - 64              |             |
|                                   |       |         |           | QC 2 - 65              |             |
|                                   |       |         |           | QC 2 - 5               |             |
|                                   |       |         |           | QC 2 - 71              |             |
|                                   |       |         |           | QC 2 - 73              |             |
|                                   |       |         |           | QC 2 - 69              |             |
|                                   |       |         |           | QC 8 - 12              |             |
|                                   |       |         |           | QC 8 - 14              | mk 19/06/27 |
|                                   |       |         |           | QC 8 - 17              |             |
|                                   |       |         |           | QC 8 - 20              |             |
|                                   |       |         |           | QC 8 - 25              |             |
|                                   |       |         |           | QC 8 - 3               |             |
|                                   |       |         |           | QC 8 - 32              |             |
|                                   |       |         |           | QC 8 - 33              |             |
|                                   |       |         |           | QC 8 - 35              |             |
|                                   |       |         |           | QC 8 - 39              |             |
|                                   |       |         |           | QC 8 - 4               |             |
|                                   |       |         |           | QC 8 - 44              |             |
|                                   |       |         |           | QC 8 - 45              |             |
|                                   |       |         |           | QC 8 - 49              |             |
|                                   |       |         |           | QC 8 - 58              |             |
|                                   |       |         |           | QC 8 - 8               |             |
|                                   |       |         |           | QC 8 - 9               |             |
|                                   |       |         |           | QC 8 - 68              |             |
|                                   |       |         |           | QC 8 - 67              |             |
|                                   |       |         |           | QC 8 - 1 (A)           |             |
|                                   |       |         |           | QC 8 - 47              |             |
|                                   |       |         |           | QC 8 - 40              |             |
|                                   |       |         |           | QC 8 - 52              |             |
|                                   |       |         |           | QC 8 - 23              |             |
|                                   |       |         |           | QC 8 - 57              |             |
| 140 Outsource - 1 - Heat Treat    | 4 pcs | 7/10/19 |           | MEI001-VC              | 10          |
| 150 Packaging 2-1 - Receive - B4B | 4 pcs | 7/10/19 | 0.00 0.00 | Packaging 2 - 1 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 2 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 3 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 5 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 4 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 6 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 7 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 8 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 9 - B4B  |             |
|                                   |       |         |           | Packaging 2 - 10 - B4B |             |
|                                   |       |         |           | Packaging 2 - 11 - B4B |             |
|                                   |       |         |           | Packaging 2 - 12 - B4B |             |
|                                   |       |         |           | Packaging 2 - 13 - B4B |             |
|                                   |       |         |           | Packaging 2 - 14 - B4B |             |
|                                   |       |         |           | Packaging 2 - 15 - B4B |             |
|                                   |       |         |           | Packaging 2 - 16 - B4B |             |
|                                   |       |         |           | Packaging 2 - 17 - B4B |             |
|                                   |       |         |           | Packaging 2 - 18 - B4B |             |
|                                   |       |         |           | Packaging 2 - 19 - B4B |             |
|                                   |       |         |           | Packaging 2 - 20 - B4B |             |
|                                   |       |         |           | Packaging 2 - 21 - B4B |             |
|                                   |       |         |           | Packaging 2 - 22 - B4B |             |
|                                   |       |         |           | Packaging 2 - 23 - B4B |             |
|                                   |       |         |           | Packaging 2 - 24 - B4B |             |
|                                   |       |         |           | Packaging 2 - 25 - B4B |             |
|                                   |       |         |           | Packaging 2 - 26 - B4B |             |

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|                                 |       |         |             |                        |            |
|---------------------------------|-------|---------|-------------|------------------------|------------|
|                                 |       |         |             | Packaging 2 - 27 - B4B |            |
|                                 |       |         |             | Packaging 2 - 28 - B4B |            |
|                                 |       |         |             | Packaging 2 - 29 - B4B |            |
|                                 |       |         |             | Packaging 2 - 30 - B4B |            |
|                                 |       |         |             | Packaging 2 - 31 - B4B |            |
|                                 |       |         |             | Packaging 2 - 32 - B4B |            |
|                                 |       |         |             | Packaging 2 - 33 - B4B |            |
|                                 |       |         |             | Packaging 2 - 34 - B4B |            |
|                                 |       |         |             | Packaging 2 - 35 - B4B |            |
|                                 |       |         |             | Packaging 2 - 36 - B4B |            |
| 155 QC 6                        | 4 pcs | 7/10/19 | 0.00 0.00   | QC 6 - 9               |            |
|                                 |       |         |             | QC 6 - 68              | DAS        |
|                                 |       |         |             | QC 6 - 61              | 61         |
|                                 |       |         |             | QC 6 - 40              | 9-89       |
| 160 Spray Paint - 2 - B4B       | 4 pcs | 7/10/19 | 200.00 0.27 | Spray Paint - 1 - B4B  | 19-7-28    |
|                                 |       |         |             | Spray Paint - 2 - B4B  |            |
|                                 |       |         |             | Spray Paint - 3 - B4B  |            |
|                                 |       |         |             | Spray Paint - 4 - B4B  |            |
| 170 QC 14                       | 4 pcs | 7/10/19 | 0.00 0.00   | QC 14 - 15             |            |
|                                 |       |         |             | QC 14 - 2              |            |
|                                 |       |         |             | QC 14 - 34             |            |
|                                 |       |         |             | QC 14 - 41             |            |
|                                 |       |         |             | QC 14 - 51             |            |
|                                 |       |         |             | QC 14 - 58             |            |
|                                 |       |         |             | QC 14 - 59             |            |
|                                 |       |         |             | QC 14 - 9              |            |
|                                 |       |         |             | QC 14 - 68             |            |
|                                 |       |         |             | QC 14 - 40             |            |
|                                 |       |         |             | QC 14 - 19             | DAS        |
|                                 |       |         |             | QC 14 - 43             | 81         |
|                                 |       |         |             | QC 14 - 24             | 9-89       |
| 180 Packaging 3-1 - Stock - B4B | 4 pcs | 7/10/19 | 0.00 0.00   | Packaging 3 - 1 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 2 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 3 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 4 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 5 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 6 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 7 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 8 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 9 - B4B  |            |
|                                 |       |         |             | Packaging 3 - 10 - B4B |            |
|                                 |       |         |             | Packaging 3 - 11 - B4B |            |
|                                 |       |         |             | Packaging 3 - 12 - B4B |            |
|                                 |       |         |             | Packaging 3 - 13 - B4B |            |
|                                 |       |         |             | Packaging 3 - 14 - B4B |            |
|                                 |       |         |             | Packaging 3 - 15 - B4B |            |
|                                 |       |         |             | Packaging 3 - 16 - B4B |            |
|                                 |       |         |             | Packaging 3 - 17 - B4B |            |
|                                 |       |         |             | Packaging 3 - 18 - B4B |            |
|                                 |       |         |             | Packaging 3 - 19 - B4B |            |
|                                 |       |         |             | Packaging 3 - 20 - B4B |            |
|                                 |       |         |             | Packaging 3 - 21 - B4B |            |
|                                 |       |         |             | Packaging 3 - 22 - B4B |            |
|                                 |       |         |             | Packaging 3 - 23 - B4B | pc CCK-13c |
|                                 |       |         |             | Packaging 3 - 24 - B4B |            |
|                                 |       |         |             | Packaging 3 - 25 - B4B |            |
|                                 |       |         |             | Packaging 3 - 26 - B4B |            |
|                                 |       |         |             | Packaging 3 - 27 - B4B |            |
|                                 |       |         |             | Packaging 3 - 28 - B4B |            |

6/5/2019

## [Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

|                |       |         |      |      |                        |              |
|----------------|-------|---------|------|------|------------------------|--------------|
|                |       |         |      |      | Packaging 3 - 29 - B4B |              |
|                |       |         |      |      | Packaging 3 - 30 - B4B |              |
|                |       |         |      |      | Packaging 3 - 31 - B4B |              |
|                |       |         |      |      | Packaging 3 - 32 - B4B |              |
|                |       |         |      |      | Packaging 3 - 33 - B4B |              |
|                |       |         |      |      | Packaging 3 - 34 - B4B |              |
|                |       |         |      |      | Packaging 3 - 35 - B4B |              |
|                |       |         |      |      | Packaging 3 - 36 - B4B |              |
| 190 QC 21 - SA | 4 pcs | 7/10/19 | 0.00 | 0.00 | QC 21 - SA - 21        | JUL - 8 2019 |
|                |       |         |      |      | QC 21 - SA - 70        |              |
|                |       |         |      |      | QC 21 - SA - 53        | JUL - 9 2019 |

Part Op 110 - HAAS CNC Vertical Machine - 1-Machine per folio FB765 DWG REV: A

FOLIO REV: AA

2-

Descriptions: Deburr and break all sharp edges EXCEPT OTHERWISE NOTED. SEE NOTE 8 \*\*\*KNIFE EDGE MUST BE SHARPENED USING STONE, REMOVE ALL BURRS ON CUTTING EDGE\*\*\*

JUL 29 2019

120 - QC2- Inspect parts off machine FAI/FAIB

130 - QC8- Inspect parts - second check

140 - PO to Metcor: FINISH: HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS PART ARE MADE FROM AISI A2 TOOL STEEL PLEASE NOTE: DETAIL C OF C REQUIRED

150 - Receive &amp; Inspect for Damage &amp; Mat'l Certs

155 - QC6- All purchased or subcontracted products

160 - Spray Paint / NDT Room - PRIME AS PER DWG AND QSI005, SEE NOTE #2 PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N \*\*\*1-2 MIL MAX\*\*\* PRIMER BATCH: 5195271

170 - QC14- Inspect Spray Paint

180 - Identify as per dwg &amp; Stock Location:

190 - QC21- Final Inspection - Work Order Release

## Job BOM

| Part / Item            | Component Name                        | Quantity            | Operation       | Container |
|------------------------|---------------------------------------|---------------------|-----------------|-----------|
| MSTEEL-A2-B0.500X1.250 | AISI A2 Tool Steel Bar, 0.500 X 1.250 | 1.5440 ft (.386 ea) | 110-HAAS 4 Axis | PH94648   |
|                        |                                       |                     | (2) 7X          | 5172910 - |

## Job Allocations

| Operation       | Component Part         | Required | Inventory | Allocated |
|-----------------|------------------------|----------|-----------|-----------|
| 110-HAAS 4 Axis | MSTEEL-A2-B0.500X1.250 | 2        | 67        | 0         |

MAT  
used  
5.064  
3.893  
+1.777  
41.67

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| Part Specifications |              |                                   |                    |         |                  |
|---------------------|--------------|-----------------------------------|--------------------|---------|------------------|
| Spec No             | Description  | Target/Tolerance                  | Limits             | Type    | Special Comments |
| 1                   | Cutter Blade | 1.030inches + 0.000<br>- 0.030    | 1.030<br>1.000     | Product | 1.025            |
| 2                   | Cutter Blade | 0.2500inches ± 0.0020             | 0.2520<br>0.2480   |         | .251             |
| 3                   | Cutter Blade | 0.5630inches ± 0.0100             | 0.5730<br>0.5530   |         | .563             |
| 4                   | Cutter Blade | 1.2000inches ± 0.0100             | 1.2100<br>1.1900   |         | 1.200            |
| 5                   | Cutter Blade | 0.1700inches + 0.0050<br>- 0.0010 | 0.1750<br>0.1690   |         | .172             |
| 6                   | Cutter Blade | 0.3400inches + 0.0000<br>- 0.0040 | 0.3400<br>0.3360   |         | .336             |
| 7                   | Cutter Blade | 0.2510inches ± 0.0100             | 0.2610<br>0.2410   |         | .251             |
| 8                   | Cutter Blade | 0.3380inches ± 0.0100             | 0.3480<br>0.3280   |         | .338             |
| 9                   | Cutter Blade | 4.5000inches ± 0.0300             | 4.5300<br>4.4700   |         | 4.500            |
| 10                  | Cutter Blade | 1.3000inches ± 0.0100             | 1.3100<br>1.2900   |         | 1.30             |
| 11                  | Cutter Blade | 3.2000inches ± 0.0100             | 3.2100<br>3.1900   |         | 3.200            |
| 12                  | Cutter Blade | 0.4900inches ± 0.0300             | 0.5200<br>0.4600   |         | .490             |
| 13                  | Cutter Blade | 0.7500inches ± 0.0100             | 0.7600<br>0.7400   | Radius  | .750             |
| 14                  | Cutter Blade | 51.6000degrees ± 0.5000           | 52.1000<br>51.1000 |         | 51.6             |
| 15                  | Cutter Blade | 30.0000degrees ± 0.5000           | 30.5000<br>29.5000 |         | 30.              |

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Entered: \_\_\_\_\_ Date: \_\_\_\_\_

# WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

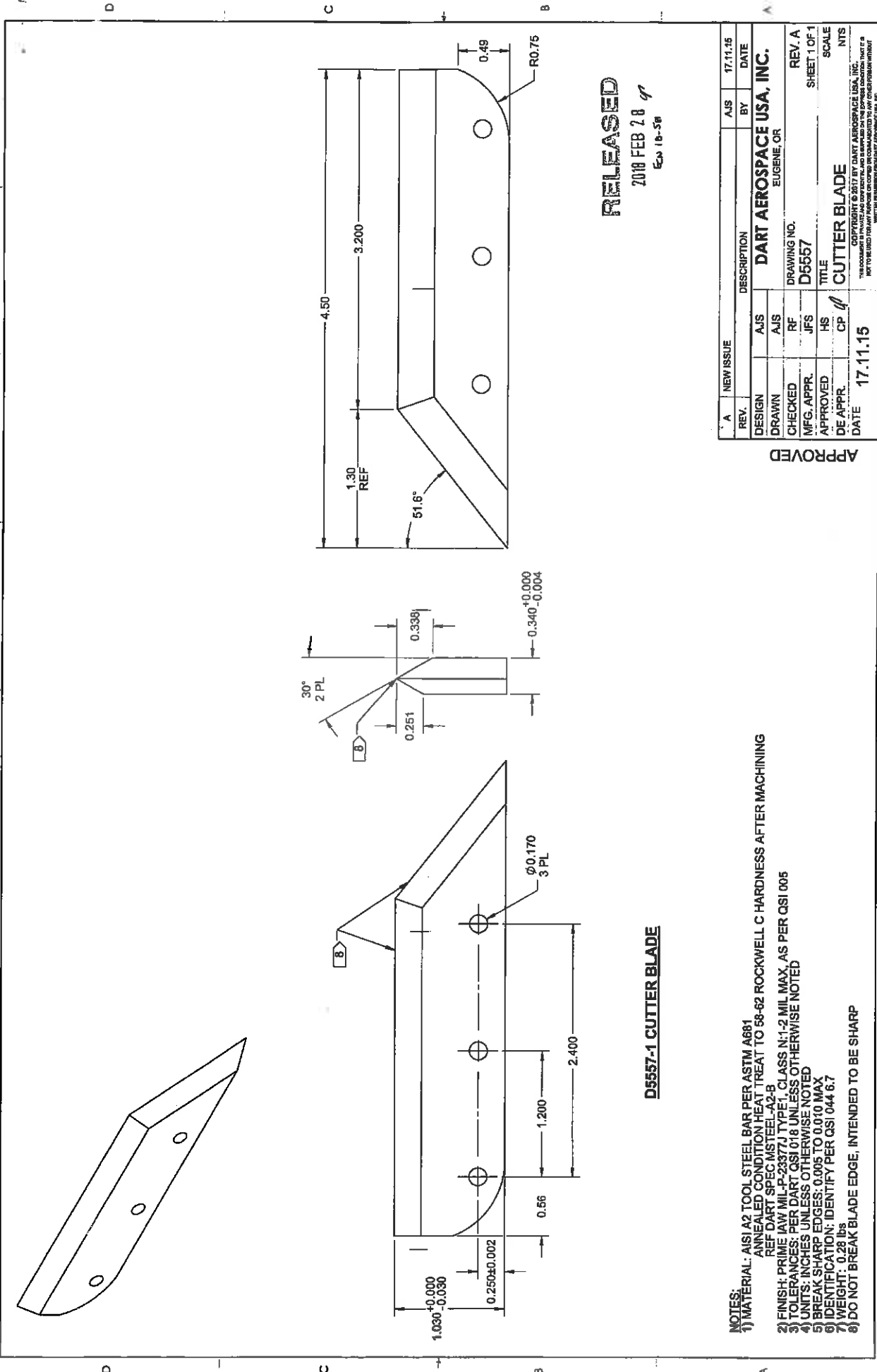
NCR No. \_\_\_\_\_

Route update only ☐



|                                                                                                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Job: _____                                                                                                                                                                                                                                                                                                                                                                   |                   | DISPOSITION                                                                                                                                                                                                                                                                                            |  | DEPARTMENT/PROCESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Part No. _____                                                                                                                                                                                                                                                                                                                                                               |                   | Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/>                                                                                                                                                                                                |  | Cross tube <input type="checkbox"/><br>Small Fab <input type="checkbox"/><br>Finishing <input type="checkbox"/><br>Skid-tube Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/><br>Eng. (Non-AW) <input type="checkbox"/><br>Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/><br>Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/> |  |
| Date: _____                                                                                                                                                                                                                                                                                                                                                                  | Sequence #: _____ | QTY Affected: _____                                                                                                                                                                                                                                                                                    |  | MRB (QS1042)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                             |                   | Disposition                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| Root Cause<br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                   | FAULT CATEGORY                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                              |                   | Pressure/Forced Bending <input type="checkbox"/><br>Crushing <input type="checkbox"/><br>Cracks <input type="checkbox"/><br>Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/><br>Mislabeled <input type="checkbox"/><br>Other/Details: _____             |  | Contamination <input type="checkbox"/><br>Misaligned/off center <input type="checkbox"/><br>BOM/Route <input type="checkbox"/><br>Broken/Damage/Defect <input type="checkbox"/><br>Incomplete/Unclear Instructions <input type="checkbox"/><br>Drill Holes <input type="checkbox"/><br>Fit/Function <input type="checkbox"/>                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                              |                   | Power Loss/Surge <input type="checkbox"/><br>Folio/Program <input type="checkbox"/><br>Grain Direction <input type="checkbox"/><br>Weld <input type="checkbox"/><br>Wrong Stock Pulled <input type="checkbox"/><br>Out of Sequence <input type="checkbox"/><br>Off-set/Set-up <input type="checkbox"/> |  | Positioned Wrong <input type="checkbox"/><br>Outside Tolerance <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Misread <input type="checkbox"/>                                                                                                                                                                                                                                                     |  |
| Completed By                                                                                                                                                                                                                                                                                                                                                                 |                   | Lead hand / Supervisor                                                                                                                                                                                                                                                                                 |  | QC / QA Coordinator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |

8 7 6 5 4 3 2 1



RELEASED  
2018 FEB 28  
Eugene

**D5557-1 CUTTER BLADE**

- NOTES:**
- 1) MATERIAL: AISI A2 TOOL STEEL BAR PER ASTM A681  
ANNEALED CONDITION HEAT TREAT TO 58-62 ROCKWELL C HARDNESS AFTER MACHINING  
REF DART SPEC MSTEEL-A2-B
  - 2) FINISH: PRIME IAW MIL-P-23377J TYPE1, CLASS N:1-2 MIL MAX, AS PER QSI 005
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
  - 7) WEIGHT: 0.28 lbs
  - 8) DO NOT BREAK BLADE EDGE, INTENDED TO BE SHARP

| REV.       | NEW ISSUE | DESCRIPTION              | AJS | BY | DATE |
|------------|-----------|--------------------------|-----|----|------|
| DESIGN     | AJS       | DART AEROSPACE USA, INC. |     |    |      |
| DRAWN      | AJS       | EUGENE OR                |     |    |      |
| CHECKED    | RF        | DRAWING NO.              |     |    |      |
| MFG. APPR. | JFS       | D5557                    |     |    |      |
| APPROVED   | HS        | TITLE                    |     |    |      |
| DE APPR.   | CP        | CUTTER BLADE             |     |    |      |
| DATE       | 17.11.15  | SCALE                    |     |    |      |
|            |           | REV. A                   |     |    |      |
|            |           | SHEET 1 OF 1             |     |    |      |
|            |           | NTS                      |     |    |      |

APPROVED

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Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB043864



**Supplier:** MEI001-VC  
Metcor Inc.  
560 Boul. Arthur Sauve  
Saint-Eustache  
QC  
J7R 5A8 Canada  
Phone: 450 473 1884  
Fax: 450 491 5498

**Attention:** Bejenaru, Livia

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB043864

**PO Date:** 6/27/19

**Due Date:** 7/19/19

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Phone:

**E-MAILED**  
2019-07-03

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

| Items               |        |          |                                                                                                                                                                                                         |          |         |             |                |                   |         |                   |                 |
|---------------------|--------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|-------------|----------------|-------------------|---------|-------------------|-----------------|
| Line Item           | Job    | Part     | Description                                                                                                                                                                                             | Status   | Account | Due Date    | Order Quantity | Received Quantity | Balance | Unit Price (CAD)  | Extended Price  |
| 1                   | 194916 | 646.3314 | Blade<br>: Various STC's<br>HEAT TREAT AS PER DWG<br>646.3300<br>FINISH: HEAT TREAT TO<br>58-62 RC<br>ROCKWELL HARDNESS<br><br>PART ARE MADE FROM<br>AISI A2 TOOL STEEL                                 | Firmed - |         | 7/19/19     | 29 pcs         | 0 pcs             | 29 pcs  | \$11.1724/pcs     | \$324.00        |
|                     |        |          |                                                                                                                                                                                                         | X29      |         | JUL 18 2019 |                |                   |         |                   | DP              |
| 2                   | 196337 | 4.5NR-10 | Lock Roller Pin<br>HEAT TREAT TO RC 50-55<br>1-Issue P/O;<br>P/O _____<br>RC _____<br>2- Bead blast<br>3- Material type ; 01<br>4- Certificate of Conformity<br>is required                             | Firmed - |         | 7/19/19     | 30 pcs         | 0 pcs             | 30 pcs  | \$10.3333/pcs     | \$310.00        |
|                     |        |          |                                                                                                                                                                                                         | 30 X     |         | JUL 09 2019 |                |                   |         |                   | DP              |
| 3                   | 196068 | D5557-1  | Cutter Blade<br>: Various STC's<br>PO to Metcor<br>FINISH: HEAT TREAT TO<br>58-62 RC<br>ROCKWELL HARDNESS<br><br>PART ARE MADE FROM<br>AISI A2 TOOL STEEL<br><br>PLEASE NOTE: DETAIL C<br>OF C REQUIRED | Firmed - |         | 7/19/19     | 20 pcs         | 0 pcs             | 20 pcs  | \$16.20/pcs       | \$324.00        |
|                     |        |          |                                                                                                                                                                                                         | X20      |         | JUL 18 2019 |                |                   |         | DAS<br>61<br>9-80 | DP              |
| <b>Grand Total:</b> |        |          |                                                                                                                                                                                                         |          |         |             |                |                   |         |                   | <b>\$958.00</b> |

Plex 7/3/19 10:14 AM Dart.Guerin.Kimberley





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**PURCHASE ORDER**  
**POHB043864**



**Order Notes**

**Procurement Quality Clauses**

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 7/3/19 10:14 AM Dart.Guerin.Kimberley

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC J7R 5A8  
Tel: 450-473-1884 / Fax: 450-491-5498

## Reçu de livraison

Delivery Receipt

| BON DE TRAVAIL<br>Order | EXPÉDITEUR<br>Shipper ID | BON D'EXPÉDITION<br>Shipper |
|-------------------------|--------------------------|-----------------------------|
| 337653                  | 1                        | 138635                      |

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT /Customer 215

**DART AEROSPACE**  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053



LIVRÉ À /Shipped To

**DART AEROSPACE**  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053

| COMMANDE DU CLIENT<br>Customer PO | BON DE LIVRAISON DU CLIENT<br>Customer Shipper No. | TYPE DE MATÉRIEL<br>Material Type | DATE DE LA COMMANDE<br>Order Date | TRANSPORTEUR<br>Carrier |
|-----------------------------------|----------------------------------------------------|-----------------------------------|-----------------------------------|-------------------------|
| HB043864                          |                                                    | A2                                | 2019/6/28                         | client                  |

| QUANTITÉ<br>Quantity | No. PIÈCE /<br>Part No. | NOM DE LA PIÈCE /<br>Part Name | DESCRIPTION DE LA PIÈCE<br>Part Description | POIDS<br>Weight |
|----------------------|-------------------------|--------------------------------|---------------------------------------------|-----------------|
|----------------------|-------------------------|--------------------------------|---------------------------------------------|-----------------|

49 646.3314  
(29) 646.3314 JOB 194916  
(20) D5557-1 JOB 196068

DAS  
61  
9-89

2 BOITE DE CARTON

| TYPE DE CONTENEUR<br>Container Type | # DE CONTENEURS<br># Of Containers | COMMENTAIRES CONTENEUR<br>Container Comments |
|-------------------------------------|------------------------------------|----------------------------------------------|
| BOITE DE CARTON                     | 2                                  |                                              |

CERTIFICAT

|                             |  |
|-----------------------------|--|
| EXPÉDIÉ PAR:<br>Shipped by: |  |
|-----------------------------|--|

**RECEIVED**  
**JUL 18 2019**  
**DART AEROSPACE LTD.**

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 49  
POIDS EXPÉDIÉ / Weight Shipped : 17,00  
QUANTITÉ RESTANTE / Quantity Remaining : 0  
POIDS RESTANT / Weight Remaining : 0,00

**APPROUVÉ**  
*[Signature]*

CERTIFICAT

|                                       |       |
|---------------------------------------|-------|
| QUANTITÉ EXPÉDIÉE / Quantity Shipped: | 49    |
| POIDS EXPÉDIÉ / Weight Shipped :      | 17,00 |

Signature:

Date:

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 337653                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

|                                                               |                                             |                                                                                      |                                     |                              |
|---------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------|------------------------------|
| COMMANDE DU CLIENT<br>customer po                             | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material                                                                 | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM                      |
| HB043864                                                      | N/A                                         | A2                                                                                   |                                     |                              |
| <u>SPÉCIFICATIONS DU PROCÉDÉ</u><br>processing specifications |                                             |                                                                                      |                                     |                              |
| VAC HARDEN                                                    |                                             |                                                                                      |                                     |                              |
| HARDEN AND TEMPER                                             |                                             |                                                                                      |                                     |                              |
| EXIGENCE / requirement                                        | SPÉCIFICATIONS / specified                  |                                                                                      | TESTS EXÉCUTÉS / performed          | RÉSULTATS DE TESTS / results |
| HARDNESS                                                      | 58 - 62 HRC                                 |                                                                                      | 49<br>(907)                         | 58 - 60 HRC                  |
| QUANTITÉ<br>quantity                                          | POIDS<br>weight                             | DESCRIPTION DES PIÈCES<br>parts description                                          |                                     |                              |
| 49                                                            | 17                                          | 646.3314<br>(29) 646.3314 JOB 194916<br>(20) D5557-1 JOB 196068<br>2 BOITE DE CARTON |                                     |                              |

DAS  
61  
9-89

DAS  
61  
9-89

### COMMENTAIRES / comments

VAC HARDEN 1800°F - 1:40 HRS  
DOUBLE TEMPER 400°F - 2:00 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

This document and any attached documents may contain confidential or proprietary information and may be subject to export control laws and regulations. If you are not the intended recipient, you are notified that any dissemination, copying of this e-mail and any attachments thereto or use of their contents by any means whatsoever is strictly prohibited. Unauthorized export or re-export is prohibited.

Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

Ce document et les documents qui lui sont joints peuvent contenir des informations confidentielles, être soumis aux réglementations relatives au contrôle des exportations ou ayant un caractère privé. S'ils ne vous sont pas destinés, nous

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

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Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 337653                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

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APPROUVÉ par / Approved by:

DATE: 2019-07-10

Lucie Desmarais  
QA Technician



# METCOR INC.

660 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A6

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité

### Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 337553                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

| COMMANDE DU CLIENT<br>customer po                             | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material                                                                 | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM |
|---------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------|---------|
| HB043864                                                      | N/A                                         | A2                                                                                   |                                     |         |
| <b>SPÉCIFICATIONS DU PROCÉDÉ</b><br>processing specifications |                                             |                                                                                      |                                     |         |
| VAC HARDEN.                                                   |                                             |                                                                                      |                                     |         |
| HARDEN AND TEMPER                                             |                                             |                                                                                      |                                     |         |
| EXIGENCE / requirement                                        | SPÉCIFICATIONS / specified                  | TESTS EXÉCUTÉS / performed                                                           | RÉSULTATS DE TESTS / results        |         |
| HARDNESS                                                      | 58 - 62 HRC                                 | 49<br>(907)                                                                          | 58 - 60 HRC                         |         |
| QUANTITÉ<br>quantity                                          | POIDS<br>weight                             | DESCRIPTION DES PIÈCES<br>parts description                                          |                                     |         |
| 49                                                            | 17                                          | 646.3314<br>(29) 646.3314 JOB 194916<br>(20) D5557-1 JOB 196068<br>2 BOITE DE CARTON |                                     |         |

### COMMENTAIRES / comments

APPROUVÉ par / Approved by:

DATE: 2019-07-10

Pierre Piché  
Chief Inspector



APPROUVÉ